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10/573,418	03/27/2006	Takeshi Iwatsu	286664US6PCT	2799

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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TRUONG, DENNIS

ART UNIT	PAPER NUMBER
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2169

NOTIFICATION DATE	DELIVERY MODE
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05/20/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,418	<b>Applicant(s)</b> IWATSU ET AL.	
	<b>Examiner</b> DENNIS TRUONG	<b>Art Unit</b> 2169	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's amendments filed 2/12/2010..

#### ***Response to Amendment***

2. It is acknowledged that claims 1, 2, 5, 6, 9-17 have been amended. Claims 8 have been canceled.
3. Claims 1- 7, 9-17 are pending.

#### ***Response to Arguments***

Applicant's arguments with respect amended claims 1, 12-14 have been fully considered but are not persuasive. Applicant argues that Craig, Tso and Ortega in combination fails to teach "registering in said storing means said content data in an uncompressed format upon a reception from said external apparatus of said content data in a compressed format." In (col. 6 lines 23-24), Tso discloses "indicates whether the cache item is compressed ("C") or decompressed ("D")," which shows that the cache is capable of storing compress and uncompressed data. Further in (col. 7 lines 11-20) Tso discloses removing decompressed content based on removal factors to create more cache space, "if the set top box includes hardwired or hardware accelerated circuits for decompressing MPEG images...the decompressed images can be deleted without a significant loss of performance...removal factor calculations are repeated for each cache item". The fact that Tso system includes hardware that decompressed content shows that the system receives compressed content and subsequently decompressed, and the decompressed content is shown to be stored in the cache (and only removed when removal factors are met to create space in the cache) therefore teaches the claimed limitation argued above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over **Craig et al. (US 6757708 B1)** (herein referenced as **Craig**) in view of **Tso et al. (US 6681298 B1)** (herein referenced as **Tso**) further in view of **Ortega et al. ("Soft Caching:Web Cache Management Techniques for Images")** (herein referenced as **Ortega**).

**As per claim 1, Craig discloses:**

- **means for transmitting a request for page information**, at least by (col. 11 lines 16-17, Fig. 4) "A request 405 for dynamic generated content is received at Web server 410", where the request and receiving of the content is transmitting, and the web server is the external apparatus.
- **means for receiving said page information, which includes identification information corresponding to content data, from an external apparatus in response to the request, and for receiving said content data**, at least by (col. 11 lines 17-21) where it is disclosed that the received request via HTTP is forwarded to a web application server that supports JSPs and servlets, then the "request is then passed to a servlet 420 corresponding to the invoked JSP, where this servlet 420 uses a bean 425". It is known in the art and further disclosed in (col. 12-13) that beans refers to the dynamic content that is generated and the status of the beans by the methods defined within the bean so the

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disclosed bean and the methods related to versions ("serialVersionUID") and cached information ("amICached") bean etc., are the identification information corresponding to the content data. And in Fig. 4 ref 420 shows that the servlet is in the external apparatus 400.3

- **storing means for storing said content data received by said means for receiving, based on said identification information independently of said page information**, at least by (fig. 6-9) discloses the process of caching based on the condition of the bean and whether it has been cached or out of date. This is done independently of the page information because the "executed methods" pertaining to the identification information are defined within the bean.
- **means for outputting the said content data along with said page information**, at least by (Fig. 3A ref. 310b, col. 9 lines 38-40) "FIG. 3B shows that the JSP 355 sets and gets 360, 361 information from each bean 365, 366, where this information may be a result of the bean retrieving 370, 371 information from the data store 375, 376. Once the dynamically generated response is complete, it is returned 310b from the JSP 355 to the browser 305."
- **But Craig fails to specifically disclose:**
  - o **(a) control means for detecting whether said storing means is storing content data independently of said page information**
  - o **(b) and for controlling said means for outputting to output said content data without an inquiry to the external apparatus when said control means detects that storing said means is storing said content data.**

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- **(c) for controlling said means for receiving to receive by said content data from the external apparatus when said content data is not stored in said storing means.**
- **(d) and for registering in said storing means said content data in an uncompressed format upon a reception from said external apparatus of said content data in a compressed format.**

However, **Ortega** teaches the above limitations **(a) (b) and (c)** at least by (page 476) “cache by temporarily storing on local disk or memory, objects which were requested by the clients...the proxy searches its local storage for the requested object. if the object is available locally (hit) it is sent to the client, otherwise (miss) the request is passed on to the remote server”, where the object is further disclosed as images which is an object being cached separate from the rest of the content (page 477), and since the cache is on a local disk it does not require any inquiries via the network.

Furthermore, **Tso** teaches the above limitations **(d)** at least by (col. 6 lines 23-24), as “indicates whether the cache item is compressed (“C”) or decompressed (“D”),” which shows that both compress and uncompressed data can be stored. Further in (col. 7 lines 11-20) Tso discloses removing decompressed content based on removal factors to create more cache space, “if the set top box includes hardwired or hardware accelerated circuits for decompressing MPEG images...the decompressed images can be deleted without a significant loss of performance...removal factor calculations are repeated for each cache item”. The fact that Tso system includes hardware that decompressed content shows that the system receives compressed content and subsequently decompressed, and the decompressed content is shown to be stored in

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the cache (and only removed when removal factors are met to create space in the cache) therefore teaches the claimed limitation argued above.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Ortega and Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of allowing the ability to cache memory intensive content of a webpage in its original form locally for quicker retrieval and relieves the load at the server.

**As per claim 2, claim 14 is incorporated and further Craig discloses:**

- wherein said controller is configured to store in said memory the content data, at least by (Fig. 6 ref 600) and further (Fig. 4 ref 430) is claimed memory.

**As per claim 3, claim 2 is incorporated and further Craig fails to specifically disclose:**

- wherein the content data is an image data and the page information is defined by a portal site.

However, **Ortega** teaches the above limitations at least by (page 477) where the object is further disclosed as images.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Ortega** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of being able to cache media that requires more bandwidth and resources for improved browsing and accessibility.

**As per claim 4, claim 2 is incorporated and further Craig fails to specifically disclose:**

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- **wherein the content data is sound data and the page information is defined by a portal site.**

However, **Tso** teaches the above limitations at least by (col. 3 lines 62-63), as “Cache items include web pages or HTML documents that include HTML text plus images, **audio**.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of being able to cache media that requires more bandwidth and resources for improved browsing and accessibility.

**As per claim 5, claim 14 is incorporated and further Craig fails to specifically disclose:**

- **wherein said controller is configured to count a number of times the content data had been reproduced, and said controller is configured to store in said memory the content data, which has been accessed more than a certain number of times.**

However, **Tso** teaches the above limitations at least by (Fig. 7A, Ref. 410) shows the cache with a count of number “times used.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of filtering out the least viewed content to optimize the usage of memory and resources.

**As per claim 6, claim 14 is incorporated and further Craig fails to specifically disclose:**



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- **wherein said controller is configured to count the number of time the content has been reproduced, and said controller if configured to remove from said storage means memory the content data, which has been infrequently accessed.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-8), as “control deletes the web page with the lowest removal factor and returns to step 252. Control also preferably removes web pages that were preloaded when the deleted web page was initially loaded.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of filtering out the least viewed content to optimize the usage of memory and resources.

**As per claim 7, claim 6 is incorporated and further Craig fails to specifically disclose:**

- **wherein said controller is configured to register in said memory an indicator showing an importance of said content data along with said content data, and to prevent said content data from being removed from said memory based on said indicator of said content data regardless of a frequency of playback access of said content data.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-5) as “control deletes the web page with the lowest removal factor and returns to step 252” where removal factor is based on (col. 7 lines 65 – col. 8 lines 3) “function F that depends on one or more of the usage and/or data type factors for each cache item” where because the removal factor is based on one or more of the usage and/or data type the removal of the item can be prevented regardless of the frequency of the page accessed.

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Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of allowing the ability to define a preference in what the user wants cached which allows more freedom and customization in how the memory and resources should be used.

**As per claim 8, canceled.**

**As per claim 9, claim 14 is incorporated and further Craig fails to specifically disclose:**

- **wherein, when said controller receives the content data in the compressed format with a certain attribute, said controller registers in said means memory said content data in uncompressed format.**

However, **Tso** teaches the above limitations at least by (col. 6 lines 23-24), as “indicates whether the cache item is compressed (“C”) or decompressed (“D”),” where (“C”) and (“D”) are claimed attribute.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of storing the content in its original form which then improves the content retrieval time.

**As per claim 10, claim 14 is incorporated and further Craig fails to specifically disclose:**

- **wherein said controller reproduces the content data, and said controller is further configured to convert the content data into a compression format corresponding to characteristics of said controller, and to then register said content data in said memory.**

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However, **Tso** teaches the above limitations at least by (col. 4 lines 29), as “control continues with step 212. Control outputs the web page to the display 30 and continues with step 204” and (col. 4 lines 44-45) as ,” control stores the web page in cache and outputs the web page to the display 30 in step 256” show reproducing stored content and (col. 6 lines 23-24), as “indicates whether the cache item is compressed (“C”) or decompressed (“D”) show the ability to reproduce compressed data.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of optimizing the storage space by storing the compressed data.

**As per claim 11, claim 14 is incorporated and further Craig discloses:**

- **wherein the page information includes said a Uniform Resource Locator (URL),** at least by (Fig. 4 Ref. 405) it should be understood the an HTTP req includes a url. And at least by (col. 11 lines 17-21) where it is disclosed that the received request via HTTP is forwarded to a web application server that supports JSPs and servlets, then the “request is then passed to a servlet 420 corresponding to the invoked JSP, where this servlet 420 uses a bean 425”, where the bean is the content data being requested.
- **and said controller is configured to access, when the content data c is not stored in said memory, said URL to acquire said content data from said external apparatus,** at least by (Fig. 7 Ref 715 and 725) shows the instance where the bean is not cached the “CS returns NULL to EM” which lead to the determination of caching in (Fig.9).

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**Claim 12** is an information reproduction method corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above.

**Claim 13** is a program product claim corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above. Where **Craig** further discloses the program product stored upon a computer readable medium to be processed, at least by (Claim 35).

**Claim 14** is an information reproduction apparatus corresponding to the apparatus claim 1, and is rejected under the same reason set forth in connection to rejection of claim 1 above. Where **Craig** further discloses the apparatus as (Fig. 1 and Fig. 2) which is used to provide the means that has been disclosed in claim 1.

**As per claim 15, claim 16 is incorporated and further Craig and Tso fails to specifically disclose:**

- **the interface includes a display of predetermined dimensions, and the second size is based on the predetermined dimensions of the display.**

However **Ortega** teaches the above limitation”...(page 477) “cache management task consist of determining both which images to maintain in the cache and the level of resolution at which they should be stored”, which shows that a different resolution can be stored which is the second sized claimed.

**As per claim 16, claim 14 is incorporated and further Craig and Tso fails to specifically disclose:**

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- **the information processing apparatus according to claim 14, wherein the controller is configured to translate the content data from a first format and first size to a second format and a second size based on a characteristic of the interface.**

However **Ortega** teaches the above limitation”...(page 477) “cache management task consist of determining both which images to maintain in the cache and the level of resolution at which they should be stored...(page 479) global storage limits for the set of N images will mean that a lower resolution image may have to be stored”, which shows that a different resolution can be stored which is the second sized claimed dependent on the local storage limitations.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Ortega** into the teaching of **Craig and Tso** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose allowing clients to retrieve data from data sources that do not necessarily support the same formats as the clients which improves the accessibility between less-conventional clients and the internet.

**As per claim 17, claim 14 is incorporated and further Craig fails to specifically disclose:**

- **wherein the identification information identifies a vendor, and the controller is configured to decompress said content data, based on the vendor.**

However, **Tso** teaches the above limitations at least by (col. 4 lines 29), as “control continues with step 212. Control outputs the web page to the display 30 and continues with step 204” and (col. 4 lines 44-45) as ,” control stores the web page in cache and outputs the web page to the display 30 in step 256” show reproducing stored content and (col. 6 lines 23-24), as “indicates

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whether the cache item is compressed (“C”) or decompressed (“D”) show the ability to reproduce compressed data.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of optimizing the storage space by storing the compressed data.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157. The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony Mahmoudi/  
Supervisory Patent Examiner, Art Unit  
2169

/Dennis Truong/  
Examiner, Art Unit 2169